ASSIGNMENT
CHAPTER-14
FACTORISATION

1. Factorise: $54x^2 + 42x^3 – 30x^4$
2. Factorise: $2x^2yz + 2xy^2z + 4xyz$
3. Factorise: $30xy – 12x + 10y – 4$
4. Regroup the terms and factorise: $z – 19 + 19xy – xyz$
5. Factorise: $100x^2 – 80xy + 16y^2$
6. Factorise: $16x^4 – y^4$
7. Factorise: $x^2 + 6x + 8$
8. Factorise: $49y^2 – 1$
9. Divide $10(x^3y^2x^2 + x^2y^3z^2 + x^2y^2z^3)$ by $5x^2y^2z^2$.
10. Simplify: $12(y^2 + 7y + 10) \div 6(y + 5)$
11. Simplify: $–45p^3 \div 9p^2$
12. Simplify: $4x^2y^2 (3z – 24), 36xy(z – 8)$
13. Divide: $81x^3(50x^2 – 98)$ by $27x^2 (5x + 7)$
14. Which of the following is the remainder when $z(5z^2 – 80)$ is divided by $5z(z – 4)$:
  (a) $z + 4$
  (b) $z – 4$
  (c) 5
  (d) 0
15. Which of the following is the quotient when $44(x^4 – 5 x^3 – 24x^2)$ is divided by $22x(x – 8)$:
  (a) $x (x + 3)$
  (b) $2x(x + 3)$
  (c) $2(x – 3)$
  (d) $x(x – 3)$
16. Which of the following is factorization of $(1 – x^2)$
  (a) $(1 + x) (1 + x)$
  (b) $(1 – x) (1 – x)$
  (c) $(1 – x) (1 + x)$
  (d) none of these
17. By which of the following $a^4 – b^4$ be divided to get quotient $(a^2 + b^2) (a – b)$ and, remainder as 0.
  (a) $a^2 + b^2$
  (b) $a – b$
  (c) $a + b$
  (d) $a^2 – b^2$

18. Is $(a - 1)(b - 1)$ the factorisation of $(ab - a - b + 1)$ or $(ab - a + b - 1)$?